

FIRST RECORD OF THE BLADDER CICADA *CYSTOSOMA SAUNDERSII* (WESTWOOD) FROM LORD HOWE ISLAND (HEMIPTERA: CICADIDAE)

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Abstract

Lord Howe Island is recorded as a new locality for *Cystosoma saundersii* (Westwood). The two specimens collected are considered to be accidental introductions from the Australian mainland, possibly from the Kempsey area, New South Wales.

Introduction

The bladder cicada *Cystosoma saundersii* (Westwood) is a common and widespread species in eastern Australia, occurring as far south as Sydney (Moulds 1990). Lord Howe Island lies some 550 km to the east of the New South Wales mid North Coast and the discovery of *Cystosoma saundersii* there is unexpected. The island's insect fauna has attracted the interest of entomologists over many years [46 papers to 1930 (Musgrave 1932); at least 75 since (G. Daniels, pers comm.)] and it is difficult to imagine how a large and striking insect such as *C. saundersii* would be overlooked.

New record

Cystosoma saundersii (Westwood)

Material examined. LORD HOWE ISLAND: 1 ♂, Orlando House, late xii.1995, Jack Shick; 1 ♂, same locality, 1.i.1996, Ray Shick.

The first specimen was not retained; the second is now in the collection of the Australian Museum, Sydney.

Discussion

Jack and Ray Shick are long time residents of Lord Howe Island. Ray is a keen naturalist and has kept diaries and notes of his observations for more than 60 years but has not encountered *C. saundersii* previously. At the very least one would expect local residents to be familiar with its distinctive call.

We conclude, therefore, that *Cystosoma saundersii* is a recent introduction to Lord Howe Island. There are previous records of *C. saundersii* establishing as introduced populations, both in suburban Sydney, one at Telopea (Moulds 1990) and another recently discovered at Roseville (Oliver Rd area) (Moulds, pers. obs.). A likely origin of the Lord Howe Island specimens was via potted citrus plants brought to the island in 1995 from the Kempsey area, NSW (R. Shick, pers. comm.). *C. saundersii* is known to frequent orange groves (Scott 1853, Bennett 1860, Moulds, pers. obs.) and is common in the Kempsey area. A closely allied species, *C. schmeltzi* Distant, is also recorded as a minor citrus pest (Anonymous 1997).

It remains to be seen if *C. saundersii* establishes on Lord Howe Island. Adults were absent during the summer of 1997/98 but a reappearance of the species is unlikely for several seasons as the life cycle of this species, like that of many other cicadas, extends for several years.

Acknowledgments

We wish to thank Jack and Ray Shick for passing on to us their observations. The generosity and assistance of Jim Dorman, Curator President of Lord Howe Island Historical Society Museum, and Dean Hiscoe, Ranger Lord Howe Island Board, are gratefully acknowledged.

References

- ANONYMOUS. 1997. Cicadas (Hemiptera). Pp 102-103, in: Smith, D., Beattie, G.A.C. and Broadley, R. (eds), *Citrus pests and their natural enemies: integrated pest management in Australia*. Horticultural Research and Development Corporation and Queensland Department of Primary Industries, Brisbane.
- BENNETT, G. 1860. *Gatherings of a naturalist in Australia; being observations principally on the animal and vegetable productions of New South Wales, New Zealand, and some of the Austral Islands*. 456 pp. John van Voorst, London.
- MOULDS, M.S. 1990. *Australian cicadas*. 217 pp, 24 pls. New South Wales University Press, Kensington.
- MUSGRAVE, A. 1932. *Bibliography of Australian Entomology 1775-1930 with biographical notes on authors and collectors*. 380 pp. Royal Zoological Society of New South Wales, Sydney.
- SCOTT, A.W. 1853. On *Cystosoma saundersii*, of Curtis and Westwood. *Proceedings of the Zoological Society of London* 20: 14-16, pl. Annulosa XXI.